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NEWS 5 JUL 02 CA/Caplus enhanced with utility model patents from China

NEWS 6 JUL 16 CAplus enhanced with French and German abstracts

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NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification

NEWS 9 JUL 30 USGENE now available on STN

NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags

NEWS 11 AUG 06 BEILSTEIN updated with new compounds

NEWS 12 AUG 06 FSTA enhanced with new thesaurus edition

NEWS 13 AUG 13 CA/CAplus enhanced with additional kind codes for granted patents

NEWS 14 AUG 20 CA/CAplus enhanced with CAS indexing in pre-1907 records

NEWS 15 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB

NEWS 16 AUG 27 USPATOLD now available on STN

NEWS 17 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data

NEWS 18 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index

NEWS 19 SEP 13 FORIS renamed to SOFIS

NEWS 20 SEP 13 INPADOCDB enhanced with monthly SDI frequency

NEWS 21 SEP 17 CA/CAplus enhanced with printed CA page images from 1967-1998

NEWS 22 SEP 17 CAplus coverage extended to include traditional medicine patents

NEWS 23 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements

NEWS 24 OCT 02 CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4 4 OCT 2007 HIGHEST RN 949197-90-4 DICTIONARY FILE UPDATES:

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

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STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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=> S L1 FULL

FULL SEARCH INITIATED 07:40:43 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -80 TO ITERATE

100.0% PROCESSED

80 ITERATIONS

21 ANSWERS

SEARCH TIME: 00.00.01

21 SEA SSS FUL L1

=> FILE CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

172.10 172.31 FILE 'CAPLUS' ENTERED AT 07:40:53 ON 05 OCT 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16 FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

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=> S L2

L3 402 L2

. => S L3 AND ANTIOXIDANT 122734 ANTIOXIDANT

L4 · 3 L3 AND ANTIOXIDANT ·

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4454891 ACID

85843 ASCORBIC ACID

(ASCORBIC (W) ACID)

L5 1 L4 AND ASCORBIC ACID

=> S L5 AND MICROWAVE

122326 MICROWAVE

L6 1 L5 AND MICROWAVE

=> D L6 IBIB ABS HITSTR 1

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:878367 CAPLUS

DOCUMENT NUMBER:

141:349924

TITLE:

Method for producing 3,3'-diallyl-4,4'-

dihydroxydiphenyl sulfone

INVENTOR(S):

Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki;

Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji

PATENT ASSIGNEE(S):

Sanko Chemical Industry Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 16 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATEN	T	OV.			KIN	D	DATE		٠.	APPL	ICAT	ION	NO.		D	ATE	
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WO 20	040	0898	83		A1		2004	1021		WO 2	004-	JP47	19		2	0040	331
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							DE,									-	-

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             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
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                          Α
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     CN 1768032
                                20060503
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                                            US 2005-551481
                                                                    20050929
                          A1
PRIORITY APPLN. INFO.:
                                             JP 2003-100352
                                                                    20030403
                                                                 Α
                                             JP 2003-306348
                                                                    20030829
                                                                 Α
                                            WO 2004-JP4719
                                                                 W
                                                                    20040331
OTHER SOURCE(S):
                         CASREACT 141:349924
     Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl
     sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone
     (II) to Claisen rearrangement reaction under the irradiation with a
     microwave, preferably in a molten state, more preferably further
     in a substantially oxygen-free atmospheric and in the presence of at least one
     compound selected from the group consisting of an antioxidant, an
     organic base compound and a chelate compound The method allows the production
of the
     objective compound having a high purity with good efficiency in a short time
     in good yield without using solvent. Thus, 10.00 g II and 0.01 g \,
     N, N-dimethylaniline were added to a quartz flask fitted with a temperature
     sensor and a magnetic stirrer, purged with N, and irradiated with
     microwave (2,450 MHz and 100 W) under a stream of N. After
     melting at 160°, the temperature was maintained at 280° for 5 min
     by turning on and off the irradiation The reaction mixture was dissolved in 10
     weight% aqueous NaOH solution, decolorized by stirring with a small quantity of
     activated charcoal, filtered, neutralized with HCl for precipitating crystals
to
     give 80-90% I.
     41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone by Claisen
        rearrangement of 4,4'-diallyloxydiphenyl sulfone under
        microwave irradiation in presence of antioxidant, organic
```

41481-66-7 CAPLUS

RN

CN

REFERENCE COUNT: 5 THERE

base compound, or chelate compound)

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                              2004:878367 CAPLUS
DOCUMENT NUMBER:
                               141:349924
                               Method for producing 3,3'-diallyl-4,4'-
TITLE:
                                dihydroxydiphenyl sulfone
INVENTOR(S):
                                Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki;
                                Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji.
PATENT ASSIGNEE(S):
                                Sanko Chemical Industry Co., Ltd., Japan
                                PCT Int. Appl., 16 pp.
SOURCE:
                                CODEN: PIXXD2
DOCUMENT TYPE:
                                Patent
                                Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                               KIND
                                                      APPLICATION NO.
                                                                                    DATE
      PATENT NO.
                                         DATE
                               ----
                                                       ______
                                                      WO 2004-JP4719
                                                                                     20040331
      WO 2004089883
                                         20041021
                                A1
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           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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                                         20041209
                                                        JP 2003-100352
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                                         20050324
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      JP 2005075757
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      EP 1612205
                                A1
                                         20060104
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                AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
      CN 1768032
                                 Α
                                         20060503
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                                                                                     20040331
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      US 2006217574
                                 Α1
                                         20060928
                                                        JP 2003-100352
                                                                                 A 20030403
PRIORITY APPLN. INFO.:
                                                                                 A
                                                        JP 2003-306348
                                                                                     20030829
                                                                                 W 20040331
                                                        WO 2004-JP4719
                               CASREACT 141:349924
OTHER SOURCE(S):
      Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl
      sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone
      (II) to Claisen rearrangement reaction under the irradiation with a microwave,
      preferably in a molten state, more preferably further in a substantially
      oxygen-free atmospheric and in the presence of at least one compound selected
from
      the group consisting of an antioxidant, an organic base compound and
      a chelate compound The method allows the production of the objective compound
      having a high purity with good efficiency in a short time in good yield
      without using solvent. Thus, 10.00 \text{ g II} and 0.01 \text{ g N,N-dimethylaniline}
      were added to a quartz flask fitted with a temperature sensor and a magnetic
      stirrer, purged with N, and irradiated with microwave (2,450 MHz and 100
      W) under a stream of N. After melting at 160°, the temperature was
      maintained at 280° for 5 min by turning on and off the irradiation
      reaction mixture was dissolved in 10 weight% aqueous NaOH solution,
decolorized by
      stirring with a small quantity of activated charcoal, filtered,
      neutralized with HCl for precipitating crystals to give 80-90% I.
ΙT
      41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone
```

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of 3,3'-dially1-4,4'-dihydroxydiphenyl sulfone by Claisen

rearrangement of 4,4'-diallyloxydiphenyl sulfone under microwave

irradiation in presence of antioxidant, organic base compound, or chelate compound)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C
$$=$$
 CH $=$ CH2 OH

O

CH2 $=$ CH $=$ CH2

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

with Antiexidant

=> D L4 IBIB ABS HITSTR 1-3

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:878367 CAPLUS

DOCUMENT NUMBER:

141:349924

TITLE:

Method for producing 3,3'-diallyl-4,4'-

dihydroxydiphenyl sulfone

INVENTOR(S):

Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki;

Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji

PATENT ASSIGNEE(S):

Sanko Chemical Industry Co., Ltd., Japan PCT Int. Appl., 16 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,
			LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,	NO,
			NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,
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			SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
			TD,															
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	JΡ	2005	0757	57		Α		2005	0324		JP 2	003-	3063	48		2	0030	829
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											JP 2	003-	3063	48	Ī	A 2	0030	829
										1	WO 2	004-	JP47	19	1	W 2	040	331
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OTHER SOURCE(S): CASREACT 141:349924

AB Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl

sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone (II) to Claisen rearrangement reaction under the irradiation with a microwave, preferably in a molten state, more preferably further in a substantially oxygen-free atmospheric and in the presence of at least one compound selected

the group consisting of an antioxidant, an organic base compound and a chelate compound The method allows the production of the objective compound having a high purity with good efficiency in a short time in good yield without using solvent. Thus, 10.00 g.II and 0.01 g N.N-dimethylaniline were added to a quartz flask fitted with a temperature sensor and a magnetic stirrer, purged with N, and irradiated with microwave (2,450 MHz and 100 W) under a stream of N. After melting at 160°, the temperature was maintained at 280° for 5 min by turning on and off the irradiation The reaction mixture was dissolved in 10 weight% aqueous NaOH solution,

decolorized by

from

stirring with a small quantity of activated charcoal, filtered, neutralized with HCl for precipitating crystals to give 80-90% I.

IT 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone by Claisen rearrangement of 4,4'-diallyloxydiphenyl sulfone under microwave irradiation in presence of antioxidant, organic base compound, or chelate compound)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

REFERENCE COUNT: 5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:77463 CAPLUS

DOCUMENT NUMBER:

136:118267

TITLE:

Preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone as color developer for thermal recording

materials

INVENTOR(S):

Kameoka, Ikuo; Tsuge, Yoshiki; Nishikawa, Makoto;

Yoshino, Takeshi; Takahashi, Toshiaki

PATENT ASSIGNEE(S):

Nikka Chemical Industry Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
TD 000000000		00000100	TD 0000 016066	
JP 2002030064 PRIORITY APPLN. INFO.:	. A	20020129	JP 2000-216356 JP 2000-216356	20000717 20000717
EUTOUTIT VEEDN' THEO''			0 E ~000-~10330	20000111

OTHER SOURCE(S): CASREACT 136:118267

AB Title compound (I), which is free from impurities causing fog, is prepared by thermal rearrangement of 4,4'-diallyloxydiphenyl sulfone (II) containing

≤50 weight ppm (as NaOH) alkalies in the presence of 0.01-1 weight% amines and/or antioxidants. II (alkali content 5 ppm) was heated in Diana Fresia W 8-kerosene mixture in the presence of N,N-dimethylaniline and hydroquinone monomethyl ether at 205-210° for 7 h, treated with activated C, and recrystd. from dichloroethane to give I with 97.1% purity and indan derivative content 0.2%.

(preparation of diallyldihydroxydiphenyl sulfone as color developer for thermal recording materials)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C
$$=$$
 CH $=$ CH2 OH

CH2 $=$ CH2 CH2

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1988:430201 CAPLUS

DOCUMENT NUMBER:

109:30201

TITLE:

Thermographic copying paper containing fluoran and hydroxydiphenyl sulfone for fading-resistant images Katsuta, Shinichiro; Toyoda, Tadashi; Unno, Tomoyuki

INVENTOR(S):

Kohjin Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

Ι

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62225391	A	19871003	JP 1986-67312	19860327
PRIORITY APPLN. INFO.:			JP 1986-67312	19860327
GI				

$$SO_2$$
 OR^3

The thermosensitive layer of a thermog. copying paper contains 3-diethylamino-6-methyl-7-anilinofluoran and/or 3-pyrrolidino-6-methyl-7-anilinofluoran as a colorless or pale color former, a hydroxydiphenyl sulfone derivative I (R1-3 = H, C≤5 alkyl, or C≤5 alkenyl) as a developer, and a heat-melting material. The paper gives images having excellent color d. and fading of the images is prevented. Thus, a paper was coated with a mixture of an aqueous solution containing

3-diethylamino-6-methyl-7-

anilinofluoran, an aqueous solution containing I (R1-3 = H), stearamide, and Zn stearate, polyvinyl alc., and a dispersion containing clay and CaCO3 and dried to obtain a thermal copying paper which gave vinyl chloride-resistant images.

IT . 41481-66-7

RL: USES (Uses)

(thermog. copying paper containing leuco dye and, for fading-resistant images)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C=CH-CH2

OH

$$CH_2$$
-CH=CH2

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FILE 'HOME' ENTERED AT 07:22:46 ON 05 OCT 2007

=> FILE REG

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 07:23:21 ON 05 OCT 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4 DICTIONARY FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

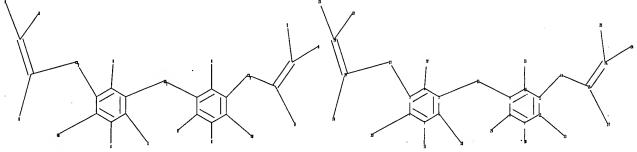
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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http://www.cas.org/support/stngen/stndoc/properties.html

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chain nodes:
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

ring nodes:
1 2 3 4 5 6 7 8 9 10 11 12 chain bonds:

ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 exact/norm bonds : 2-20 12-21 exact bonds : 1-31 3-17 4-32 5-13 6-28 7-30 8-29 9-13 10-33 11-14 14-15 15-16 15-27 16-24 16-25 17-18 18-19 18-26 19-22 19-23 normalized bonds : 1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS

22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS

30:CLASS

31:CLASS 32:CLASS 33:CLASS

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                LMEDLINE coverage updated
NEWS
NEWS
        JUL 02
                SCISEARCH enhanced with complete author names
        JUL 02
                CHEMCATS accession numbers revised
NEWS
NEWS
        JUL 02
                CA/CAplus enhanced with utility model patents from China
        JUL 16
NEWS
                CAplus enhanced with French and German abstracts
     7
        JUL 18
                CA/CAplus patent coverage enhanced
NEWS
                USPATFULL/USPAT2 enhanced with IPC reclassification
    8
        JUL 26
NEWS
     9
        JUL 30
                USGENE now available on STN
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        AUG 06
NEWS 11
                BEILSTEIN updated with new compounds
NEWS 12
        AUG 06
                 FSTA enhanced with new thesaurus edition
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        AUG 13
                 CA/CAplus enhanced with additional kind codes for granted
                 patents
        AUG 20
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NEWS 15
        AUG 27
                 Full-text patent databases enhanced with predefined
                 patent family display formats from INPADOCDB
NEWS 16 AUG 27
                 USPATOLD now available on STN
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        AUG 28
                 spectral property data
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        SEP 13
                 FORIS renamed to SOFIS
NEWS 20
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                 INPADOCDB enhanced with monthly SDI frequency
                 CA/CAplus enhanced with printed CA page images from
NEWS 21
        SEP 17
                 1967-1998
NEWS 22 SEP 17
                CAplus coverage extended to include traditional medicine
                 patents
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 23 SEP 24
        OCT 02
NEWS 24
                CA/CAplus enhanced with pre-1907 records from Chemisches
                 Zentralblatt
NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
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FULL ESTIMATED COST

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New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\BOY-14.str

STRUCTURE UPLOADED L1

=> D L1

L1 HAS NO ANSWERS

STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> S L1 FULL

FULL SEARCH INITIATED 07:23:49 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -

80 TO ITERATE

100.0% PROCESSED

80 ITERATIONS

21 ANSWERS

SEARCH TIME: 00.00.01

21 SEA SSS FUL L1 L2

=> FILE CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL SESSION ENTRY

FULL ESTIMATED COST

172.10 172.31 FILE 'CAPLUS' ENTERED AT 07:24:00 ON 05 OCT 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16 FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

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=> S L2

L3 402 L2

=> S L3 AND REARRANGEMENT 132061 REARRANGEMENT

L4 15 L3 AND REARRANGEMENT

=> S L4 AND MICROWAVE

122326 MICROWAVE

L5 2 L4 AND MICROWAVE .

=> D L5 IBIB ABS HITSTR 1-2

L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:878367 CAPLUS

DOCUMENT NUMBER: 141:349924

TITLE: Method for producing 3,3'-diallyl-4,4'-

dihydroxydiphenyl sulfone

INVENTOR(S): Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki;

Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji

PATENT ASSIGNEE(S): Sanko Chemical Industry Co., Ltd., Japan

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO	٥.		KIN	D !	DATE		i	APPL	ICAT:	ION	NO.		D	ATE	
				- ·											
WO 200408	89883		A1		2004	1021	1	WO 21	004-	JP47	19		20	00403	331
W: A	AE, A	G, AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
(CN, C	O, CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
(GE, G	H, GM,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,
I	LR, L	S, LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	NO,
1	NZ, O	M, PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,
7	TM, T	N, TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
RW: F	BW, G	H, GM,	ΚE,	LS,	MW,	ΜZ,	SD;	SL,	SZ,	ΤZ,	ŪG,	ZM,	ZW,	AM,	ΑZ,
F	BY, K	G, KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
F	ES, F	I, FR.	GB,	GR,	HU,	IE,	IT,	LU.	MC.	NL.	PL,	PT,	RO,	SE,	SI,

SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG JP 2004345955 JP 2003-100352 Α 20041209 JP 2005075757 Α 20050324 JP 2003-306348 20030829 EP 1612205 Α1 20060104 EP 2004-724844 20040331 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK CN 1768032 20060503 Α CN 2004-80009129 20040331 US 2006217574 Α1 20060928 US 2005-551481 20050929 PRIORITY APPLN. INFO.: JP 2003-100352 Α 20030403 JP 2003-306348 Α 20030829 WO 2004-JP4719 20040331 OTHER SOURCE(S): CASREACT 141:349924 Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone (II) to Claisen rearrangement reaction under the irradiation with a microwave, preferably in a molten state, more preferably further in a substantially oxygen-free atmospheric and in the presence of at least one compound selected from the group consisting of an antioxidant, an organic base compound and a chelate compound The method allows the production of the objective compound having a high purity with good efficiency in a short time in good yield without using solvent. Thus, 10.00 g II and 0.01 g N,N-dimethylaniline were added to a quartz flask fitted with a temperature sensor and a magnetic stirrer, purged with N, and irradiated with microwave (2,450 MHz and 100 W) under a stream of N. After melting at 160°, the temperature was maintained at 280° for 5 min by turning on and off the irradiation The reaction mixture was dissolved in 10 weight% aqueous NaOH solution, decolorized by stirring with a small quantity of activated charcoal, filtered, neutralized with HCl for precipitating crystals to give 80-90% I. ΙT 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone by Claisen rearrangement of 4,4'-diallyloxydiphenyl sulfone under microwave irradiation in presence of antioxidant, organic base compound, or chelate compound) 41481-66-7 CAPLUS RN CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

AUTHOR(S):

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:958526 CAPLUS

DOCUMENT NUMBER: 141:190554

TITLE: Microwave-assisted solvent-free

instantaneous Claisen rearrangement for

synthesis of bis(3-allyl-4-hydroxyphenyl) sulfone Yamamoto, Tetsushi; Wada, Yuji; Enokida, Hirotaka;

Fujimoto, Masaki; Nakamura, Katsunori; Yanagida, Shozo

CORPORATE SOURCE:

Material and Life Science, Graduate School of

Engineering, Osaka University, Suita, Osaka, 565-0871,

Japan

SOURCE:

Green Chemistry (2003), 5(6), 690-692

CODEN: GRCHFJ; ISSN: 1463-9262

PUBLISHER:

Royal Society of Chemistry

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 141:190554

Solvent-free Claisen rearrangement of bis(4-allyloxyphenyl)

sulfone under microwave irradiation for 5 min gave high yields of

bis(3-allyl-4-hydroxyphenyl) sulfone, which has been synthesized up to now under conventional heating for 2-30 h as a color developer for a heat- or

pressure-sensitive recording in industry.

IT 41481-66-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(solvent-free, microwave irradiated Claisen

rearrangement of bis(allyloxyphenyl) sulfone)

RN 41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

H2C
$$=$$
 CH $-$ CH $_2$ OH

O

CH $_2$ - CH $=$ CH $_2$

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS

L1

STR

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=> S L1 FULL

FULL SEARCH INITIATED 07:23:49 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 80 TO ITERATE

100.0% PROCESSED

80 ITERATIONS

21 ANSWERS

SEARCH TIME: 00.00.01

L2

21 SEA SSS FUL L1

=> FILE CAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY SESSION 172.10 172.31

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FILE COVERS 1.907 - 5 Oct 2007 VOL 147 ISS 16 FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

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=> S L2

L3

402 L2

=> S L3 AND REARRANGEMENT

15 L3 AND REARRANGEMENT

=> S L4 AND MICROWAVE

122326 MICROWAVE

2 L4 AND MICROWAVE L5

=> D L5 IBIB ABS HITSTR 1-2

ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:878367 CAPLUS

DOCUMENT NUMBER:

141:349924

TITLE:

Method for producing 3,3'-diallyl-4,4'-

dihydroxydiphenyl sulfone

INVENTOR(S):

Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki; Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji

PATENT ASSIGNEE(S):

Sanko Chemical Industry Co., Ltd., Japan PCT Int. Appl., 16 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

objective

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	rent 1	NO.			KIN)	DATE			APPL	ICAT	I NO	NO.		Di	ATE	
WO	2004	0898	83		A1		2004	1021		WO 2	2004-3	JP47	19		2	0040	331
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,	NO,
		ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
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CASREACT 141:349924 OTHER SOURCE(S):

Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone (II) to Claisen rearrangement reaction under the irradiation with a microwave, preferably in a molten state, more preferably further in a substantially oxygen-free atmospheric and in the presence of at least one compound selected from the group consisting of an antioxidant, an organic base compound and a chelate compound The method allows the production of the

compound having a high purity with good efficiency in a short time in good yield without using solvent. Thus, 10.00 g II and 0.01 g N, N-dimethylaniline were added to a quartz flask fitted with a temperature sensor and a magnetic stirrer, purged with ${\tt N}$, and irradiated with microwave (2,450 MHz and 100 W) under a stream of N. After melting at 160° , the temperature was maintained at 280° for 5 min by turning on and off the irradiation The reaction mixture was dissolved in 10 weight% aqueous NaOH solution, decolorized by stirring with a small quantity of activated charcoal, filtered, neutralized with HCl for precipitating crystals

to:

give 80-90% I.

41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone IT

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone by Claisen

rearrangement of 4,4'-diallyloxydiphenyl sulfone under

microwave irradiation in presence of antioxidant, organic base compound,

or chelate compound)

RN41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:958526 CAPLUS

DOCUMENT NUMBER:

141:190554

TITLE:

Microwave-assisted solvent-free

instantaneous Claisen rearrangement for

synthesis of bis(3-allyl-4-hydroxyphenyl) sulfone Yamamoto, Tetsushi; Wada, Yuji; Enokida, Hirotaka;

AUTHOR(S):

Fujimoto, Masaki; Nakamura, Katsunori; Yanagida, Shozo

Material and Life Science, Graduate School of CORPORATE SOURCE:

Engineering, Osaka University, Suita, Osaka, 565-0871,

Japan

SOURCE:

Green Chemistry (2003), 5(6), 690-692

CODEN: GRCHFJ; ISSN: 1463-9262

PUBLISHER:

Royal Society of Chemistry

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 141:190554

Solvent-free Claisen rearrangement of bis(4-allyloxyphenyl) sulfone under microwave irradiation for 5 min gave high yields of bis(3-allyl-4-hydroxyphenyl) sulfone, which has been synthesized up to now under conventional heating for 2-30 h as a color developer for a heat- or pressure-sensitive recording in industry.

ΙT 41481-66-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (solvent-free, microwave irradiated Claisen rearrangement of bis(allyloxyphenyl) sulfone)

41481-66-7 CAPLUS RN

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C=CH-CH2

OH

$$CH_2$$
-CH=CH2

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L4 IBIB ABS HITSTR 1-15

L4 ANSWER 1,OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:911709 CAPLUS

DOCUMENT NUMBER:

147:118902

TITLE:

Synthesis and properties of novel allyl group-containing diamine curing agents

AUTHOR(S):

Liu, Jin-gang; Zhao, Xiao-juan; Yang, Hai-xia; Shi,

Jin-qi

Journal

CORPORATE SOURCE:

Laboratory of Advanced Polymer Materials, Institute of

Chemistry, Chinese Academy of Sciences, Beijing,

100080, Peop. Rep. China

SOURCE:

Reguxing Shuzhi (2006), 21(3), 5-8

CODEN: RESHEQ; ISSN: 1002-7432

PUBLISHER:

Reguxing Shuzhi Bianjibu

DOCUMENT TYPE:

LANGUAGE: Chinese

AΒ A series of allyl bisphenol compds. had been synthesized via condensation reaction of allyl bromide and aromatic diphenols, followed by thermal rearrangement reaction. Novel allyl group-containing diamine curing agents were developed by Williamson's reaction of the obtained allyl bisphenol compds. and 4-bromo-1-nitrobenzene, followed by reduction reactions. The curing properties of the new curing agent, 2,2-bis[4'-(4"aminophenoxy)-3'-allylphenyl]propane (APAP) to epoxy resins and bismaleimides were researched. It was shown that the curing agent exhibited good curing effect to the resins, the curing reactions of APAP -BMDM and APAP-DGEBA were taken place over a wide range of temperature, their temps. at exothermal peak were 256.2 and 190.7 degrees resp., the glass transition temperature of cured APAP-DGEBA was 154.4 degrees but there was no glass state transition for the cured APAP-BMDM in test conditions and the curing resin showed good thermal stability and solvent resistance, such that the starting decomposition temperature of APAP-BMDM cured and the carbon

residue

in 700 degrees were 426.8 degrees and 46.5 percent and were increased with 52.6 degrees and 23.4 percent resp. more than that of APAP-DGEBA cured and the two thermosets were hardly dissolved in common solvents such as NMP, DMF, DMAc, phenol solvent and strong base (30% NaOH), strong acid (concentrated sulfuric acid) solns.

IT 41481-66-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(in synthesis and properties of novel allyl group-containing diamine curing agents)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C
$$=$$
 CH $=$ CH2 OH $=$ CH2 $=$ CH2

ANSWER 2 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:878367 CAPLUS

DOCUMENT NUMBER:

141:349924

TITLE:

Method for producing 3,3'-diallyl-4,4'-

dihydroxydiphenyl sulfone

INVENTOR(S):

Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki; Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji

PATENT ASSIGNEE(S): Sanko Chemical Industry Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 16 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT	NO.			KIN	D	DATE			APPI	LICAT	ION I	NO.		D.	ATE	
WO	2004	0898	83		A1		2004	1021	1	WO 2	2004-	JP47	19		2	0040	331
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	ΕE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,	NO,
		ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,
	·	TM,	TN,	TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,
		TD,	ΤG														
	2004				Α					JP 2	2003-:	1003	52		2	0030	403
	2005						2005				2003-				_	0030	
EΡ	1612										2004-	_			_	0040	
	R:										IT,						
											TR,						
	1768										2004-					0040	
	2006						2006	0928			2005-					0050	
IORIT	Y APP	LN.	INFO	. :							2003-					0030	
											2003-					0030	
										WO 2	2004-	JP47	19	1	W 2	0040	331
HER SO	DURCE	$\{S\}$:			CAS	REAC	Т 14	1 • 34	9924								

OTHER SOURCE(S): CASREACT 141:349924

Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone (II) to Claisen rearrangement reaction under the irradiation with a microwave, preferably in a molten state, more preferably further in a substantially oxygen-free atmospheric and in the presence of at least one compound

selected from the group consisting of an antioxidant, an organic base compound and a chelate compound The method allows the production of the objective compound

having a high purity with good efficiency in a short time in good yield without using solvent. Thus, 10.00 g II and 0.01 g N,N-dimethylaniline were added to a quartz flask fitted with a temperature sensor and a magnetic stirrer, purged with N, and irradiated with microwave (2,450 MHz and 100 W) under a stream of N. After melting at 160°, the temperature was maintained at 280° for 5 min by turning on and off the irradiation. The reaction mixture was dissolved in 10 weight% aqueous NaOH solution, decolorized by

stirring with a small quantity of activated charcoal, filtered, neutralized with HCl for precipitating crystals to give 80-90% I.

IT 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone by Claisen

rearrangement of 4,4'-diallyloxydiphenyl sulfone under

microwave irradiation in presence of antioxidant, organic base compound, or chelate compound)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C
$$=$$
 CH $=$ CH2 OH $=$ CH2 $=$ CH2 $=$ CH2

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 · ANSWER 3 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

5

ACCESSION NUMBER:

2003:958526 CAPLUS

DOCUMENT NUMBER:

141:190554

TITLE:

Microwave-assisted solvent-free instantaneous Claisen

rearrangement for synthesis of

bis(3-allyl-4-hydroxyphenyl) sulfone

AUTHOR(S):

Yamamoto, Tetsushi; Wada, Yuji; Enokida, Hirotaka;

Fujimoto, Masaki; Nakamura, Katsunori; Yanagida, Shozo

CORPORATE SOURCE:

Material and Life Science, Graduate School of

Engineering, Osaka University, Suita, Osaka, 565-0871,

Japan

SOURCE:

Green Chemistry (2003), 5(6), 690-692

CODEN: GRCHFJ; ISSN: 1463-9262

PUBLISHER:

Royal Society of Chemistry

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 141:190554

AB Solvent-free Claisen rearrangement of bis(4-allyloxyphenyl) sulfone under microwave irradiation for 5 min gave high yields of bis(3-allyl-4-hydroxyphenyl) sulfone, which has been synthesized up to now under conventional heating for 2-30 h as a color developer for a heat- or pressure-sensitive recording in industry.

IT 41481-66-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (solvent-free, microwave irradiated Claisen rearrangement of bis(allyloxyphenyl) sulfone)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C
$$=$$
 CH $=$ CH2 OH

CH2 $=$ CH2 CH2 $=$ CH2

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:286132 CAPLUS

DOCUMENT NUMBER:

136:309756

TITLE:

Preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone for color developer for thermal printing

APPLICATION NO.

DATE

materials

INVENTOR(S):

Kameoka, Ikuo; Tsuge, Koki; Nishikawa, Makoto;

Takahashi, Toshiaki

DATE

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

PATENT ASSIGNEE(S):

Nikka Chemical Industry Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

KIND

LANGUAGE:

CN

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

JP 2002114757	Α	20020416	JP 2000-311500	20001012
PRIORITY APPLN. INFO.:			JP 2000-311500	20001012
OTHER SOURCE(S):	CASREA	CT 136:30975	6	
AB The compound is pre	pared b	y thermal re	arrangement of	
			presence of 0.5-20 m	
, (based on alkalies	in 4,4'	-diallyloxyd	liphenyl sulfone) of a	cid.
4,4'-Diallyloxydiph	enyl su	lfone was he	ated with H2SO4 in pa	raffin solvent
at 205-210° for 7 h	to giv	e a reaction	mixture containing 9	2.4 area% (by
HPLC) 3,3'-diallyl-				
IT 41481-66-7P, 3,3'-D	iallyl-	4,4'-dihydro	xydiphenyl sulfone	
RL: IMF (Industrial	manufa	cture); SPN	(Synthetic preparatio	n); TEM ·
(Technical or engin	eered m	aterial use)	; PREP (Preparation);	USES (Uses)
(preparation of	diallyl	dihydroxydip.	henyl sulfone)	
RN 41481-66-7 CAPLUS			•	

H2C=CH-CH2
OH
$$CH_2$$
-CH=CH2

4 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:77464 CAPLUS

DOCUMENT NUMBER:

136:118268

TITLE:

Preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone as color developer for thermal recording

INVENTOR(S):

Tsuge, Yoshiki; Kameoka, Ikuo; Nishikawa, Makoto;

Yoshino, Takeshi; Takahashi, Toshiaki

PATENT ASSIGNEE(S):

Nikka Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002030065	Α	20020129	JP 2000-216357	20000717
PRIORITY APPLN. INFO.:			JP 2000-216357	20000717

OTHER SOURCE(S):

CASREACT 136:118268

Title compound (I), which is free from impurities causing fog, is prepared by thermal rearrangement of 4,4'-diallyloxydiphenyl sulfone (II) containing ≤50 weight ppm (as NaOH) alkalies. II (alkali content 5 ppm) was heated in Diana Fresia W 8 -kerosene mixture at 205-210° for 7 h, treated with activated C, and recrystd. from dichloroethane to give I with

96.2% purity and indan derivative content 0.3%. 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone IT RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

(Preparation)

(preparation of diallyldihydroxydiphenyl sulfone as color developer for thermal recording materials)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

ANSWER 6 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:77463 CAPLUS

DOCUMENT NUMBER:

136:118267

TITLE:

Preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone as color developer for thermal recording

materials

INVENTOR(S):

Kameoka, Ikuo; Tsuge, Yoshiki; Nishikawa, Makoto;

Yoshino, Takeshi; Takahashi, Toshiaki Nikka Chemical Industry Co., Ltd., Japan

PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 9 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002030064	Α	20020129	JP 2000-216356	20000717

PRIORITY APPLN. INFO.:

JP 2000-216356

20000717

OTHER SOURCE(S):

CASREACT 136:118267

AB Title compound (I), which is free from impurities causing fog, is prepared by thermal rearrangement of 4,4'-diallyloxydiphenyl sulfone (II) containing ≤50 weight ppm (as NaOH) alkalies in the presence of 0.01-1 weight% amines and/or antioxidants. II (alkali content 5 ppm) was heated in Diana Fresia W 8-kerosene mixture in the presence of N,N-dimethylaniline and hydroquinone monomethyl ether at 205-210° for 7 h, treated with activated C, and recrystd. from dichloroethane to give I with 97.1% purity and indan derivative content 0.2%.

IT 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of diallyldihydroxydiphenyl sulfone as color developer for thermal recording materials)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1999:481081 CAPLUS

DOCUMENT NUMBER:

131:151759

TITLE:

Thermal recording materials for images with good oil

and plasticizer resistance

INVENTOR(S):

Okuda, Masatoshi; Yonese, Naoki

PATENT ASSIGNEE(S):

Oji Paper Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 7 pp.

SOURCE: Jpn. Kokai To CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PRIO	JP 11208122 PRITY APPLN. INFO.:	Α	19990803	JP 1998-9425 JP 1998-9425	19980121 19980121
AB	layers containing l	euco dy	es, 3,3'-dia	with heat-sensitive re	enyl sulfone
	sulfone storage mod	lifiers.	The develo	2-methyl-2,3-epoxypropy pers are obtained by Cl yl sulfone and have con	aisen
	of 3-allyl-4,4'-dih hydroxy)diphenyl su	ydroxyd llfone-1	liphenyl sulf -oxa-2-methy	one and 5-(3-allyl-4- lindan ≤0.5%. The mate	rials
IT	41481-66-7P, 3,3'-D	iallyl-	·4,4'-dihydro		
	(Preparation); USES	(Uses)		ndustrial manufacture);	
	(thermal recordi plasticizer-resi			ning sulfone developers	for oil- and
RN	41481-66-7 CAPLUS				
CN	Phenol, 4,4'-sulfor	ylbis[2	:-(2-propen-1	-yl)- (CA INDEX NAME)	

H2C
$$=$$
 CH $=$ CH2 OH

O

CH2 $=$ CH $=$ CH2

ANSWER 8 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

1999:481080 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 131:151758

TITLE: Thermal recording materials for images with good

storage stability

Watanabe, Kazuo; Iwasaki, Nobuyuki INVENTOR(S):

PATENT ASSIGNEE(S): Oji Paper Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 11208121	A	19990803	JP 1998-9424	19980121
PRIO	RITY APPLN. INFO.:			JP 1998-9424	19980121
AB	In the materials ha	ving he	at-sensitive	recording layers, prot	ective
	layers, and backcoa	t layer	s containing	re-wetting pastes or a	dhesives,
	developers comprise	3,3'-d	ially1-4,4'-	dihydroxydiphenyl sulfo	ne obtained
	by Claisen rearrang	ement o	f 4,4'-diall	yloxydiphenyl sulfone a	.nd
	have content of 3-a	11y1-4,	4'-dihydroxy	diphenyl sulfone and	
				1-oxa-2-methylindan ≤0.	5%.
	The materials give	fog-fre	e images wit	h good storage stabilit	y and light
	resistance.	-		_	
IT	41481-66-7P, 3,3'-D	iallyl-	4,4'-dihydro	xydiphenyl sulfone	
	nr				DD DD

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

> (sulfone developers of thermal recording materials for images with good storage stability)

RN41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

H2C=CH-CH2

OH

$$CH_2$$
-CH=CH2

L4ANSWER 9 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

1999:463013 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 131:136813 TITLE:

Heat-sensitive recording material containing allyl

dihydroxydiphenylsulfone

INVENTOR(S):

Michikawa, Kohei; Okada, Kiyomi

PATENT ASSIGNEE(S): SOURCE:

Oji Paper Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

1

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PRIC AB	JP 11198545 PRITY APPLN. INFO.:	A transpa		JP 1998-8754 JP 1998-8754 coated with a leuco dy	
	coloring agent-cont protective layer, i comprises 3,3'-dial	aining n which lyl-4,4 4'-dial	heat-sensiti the develop '-dihydroxyd lyloxydiphen	ve recording layer and er (average particle si iphenylsulfone, manufac ylsulfone, containing	an optional ize 0.1-1.0µm)
IT		y)diphe with st	nylsulfone-1 orage stabil	-oxa-2-methylindane. Sity.	The material '
	(Technical or engin	eered m	aterial use)	(Modifier or additive or; PREP (Preparation); Containing dihydroxydig	USES (Uses)

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

coloring agent) 41481-66-7 CAPLUS

CAPLUS COPYRIGHT 2007 ACS on STN ANSWER 10 OF 15

ACCESSION NUMBER:

1993:82050 CAPLUS

DOCUMENT NUMBER:

118:82050

TITLE:

SOURCE:

RN

CN

Aromatic polyallyl compounds as materials for resins

INVENTOR(S): PATENT ASSIGNEE(S): Satomura, Masato; Takeda, Akihiko

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04288031 PRIORITY APPLN. INFO.: OTHER SOURCE(S):	A	19921013	JP 1991-49704	19910314
	MARPAT	118:82050	JP 1991-49704	19910314

$$CH_2 = CHCH_2$$
 $CH_2CH = CH_2$
 $CH_2CH = CH_2$
 $CH_2CH = CH_2$
 $CH_2CH = CH_2$

AB The title compds. I [X = direct bond, SO2, CR1R2, S, O; R1-2 = H, C1-8](un) substituted alkyl, aryl; R1R2 may be bonded to form a 5- or 6-membered ring], useful as materials for thermosetting resins or epoxy resins, are prepared Thus, treating 0.1 mol bis(3-allyl-4-hydroxyphenyl) sulfone with 0.21 mol allyl bromide in AcNMe2 in presence of K2CO3 at 70° for 5 h gave bis(3-allyl-4-allyloxyphenyl) sulfone, which was heated at 200° for 6 h to give I (X = SO2).

41481-66-7, Bis(3-allyl-4-hydroxyphenyl) sulfone ITRL: RCT (Reactant); RACT (Reactant or reagent) (etherification of, with allyl bromide)

RN 41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

H2C
$$=$$
 CH $-$ CH $_2$ OH $=$ CH $_2$ CH $_2$ CH $_2$ CH $_2$ CH $_2$ CH $_3$ CH $_4$ CH $_2$

CAPLUS COPYRIGHT 2007 ACS on STN ANSWER 11 OF 15

ACCESSION NUMBER:

1993:60708 CAPLUS

DOCUMENT NUMBER:

118:60708

TITLE:

Aromatic polyallyl compounds as materials for resins

INVENTOR(S): PATENT ASSIGNEE(S): Satomura, Masato; Takeda, Akihiko Fuji Photo Film Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04282336	A	19921007	JP 1991-43885	19910308
PRIORITY APPLN. INFO.:			JP 1991-43885	19910308
CT				

$$CH_2CH = CH_2$$

$$CH_2CH = CH_2$$

$$CH_2CH = CH_2$$

$$X$$

$$CH_2CH = CH_2$$

$$2$$

$$1$$

The title compds. I (X = direct bond, SO2, CR1R2, S, O; R1-2 = H, C1-8 AB alkyl; R1R2 may be bonded to form a 5- or 6-membered ring), useful as materials for thermosetting resins or epoxy resins, are prepared Thus, treating 0.1 mol bis (3-allyl-4-hydroxyphenyl) sulfone with 0.21 mol allyl bromide in AcNMe2 in presence of K2CO3 at 70° for 5 h gave bis(3-allyl-4-allyloxyphenyl) sulfone, which was heated at 200° for 6 h to give bis(3,5-diallyl-4-hydroxyphenyl) sulfone (II). Then, II was further treated with 0.21 mol allyl bromide in AcNMe2 to give I (X = SO2).

IT41481-66-7, Bis(3-allyl-4-hydroxyphenyl) sulfone RL: RCT (Reactant); RACT (Reactant or reagent) (etherification of, with allyl bromide)

41481-66-7 CAPLUS RN

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

ANSWER 12 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1987:587555 CAPLUS

DOCUMENT NUMBER:

107:187555

TITLE:

Bisphenol S derivatives as developers for

heat-sensitive recording paper

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

Ikeda, Fukuji; Takahashi, Toshiaki Nikka Chemical Industry Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
JP 62053957 JP 03033153		19870309 19910516	JP 1985-191972	19850902			
PRIORITY APPLN.	INFO.:		JP 1985-191972				
			ihydroxydiphenylsulfo				
rearrangeme	nt of 4,4'-dial	.lyloxydiphe	enylsulfone, the read	ction is			
controlled so that the final reaction mixture contains the half-rearrange							
product, 3-allyl-4-hydroxy-4'-allyloxydiphenylsulfone, 5-20% of the							
	starting material and the completely rearranged product,						
	3,3'-diallyl-4,4'-dihydroxydiphenylsulfone, ≤90%. The product is						
			tic, and alc., glycol				
= = 3= 1 = 0 = 0			, 	,			

[(10-9):(10-90):(0.1-30) weight%] solvent. The bisphenol S derivs. prepared in the manner give color developers for heat-sensitive recording sheets characterized by low fog.

IT 41481-66-7P

RL: PREP (Preparation)

(preparation of, by Claisen rearrangement, as heat-sensitive recording color developer)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

L4 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1986:168122 CAPLUS

DOCUMENT NUMBER:

104:168122

TITLE:

Phenol derivatives useful in thermal recording

materials

INVENTOR(S):

Shinmoto, Masaki

PATENT ASSIGNEE(S):

Nippon Kayaku Co., Ltd., Japan

SOURCE:

Ger. Offen., 22 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	_	DATE
DE 3504482 DE 3504482	A1 C2	19850814 19920312	DE 1985-3504482	-	19850209
JP 60169456	A	19850902	JP 1984-24311		19840214
JP 60208286	A	19851019	JP 1984-63277		19840402
JP 03034475 GB 2154236	B A	19910522 19850904	GB 1985-2407		19850131
GB 2154236	В	19870520			13030131
US 4596997	Α	19860624	US 1985-696913		19850131
СН 662785	A5	19871030	CH 1985-644		19850212
PRIORITY APPLN. INFO.:			JP 1984-24311	Α	19840214
			JP 1984-63277	·A	19840402

OTHER SOURCE(S):

CASREACT 104:168122

GΙ

$$HO \longrightarrow SO_2 \longrightarrow OH$$
 $H_2C:CHCH_2$

Bis(3-allyl-4-hydroxyphenyl)sulfone (I) is prepared by condensation of the AB sulfone II (R = H, alkali metal) with allyl derivative H2C:CHCH2R1 [R1 = halo, R2SO3; R2 = alkyl, (un) substituted Ph], followed by rearrangement of the reaction product. Thus, a mixture of 4,4'-sulfonyldiphenol, toluene, NaOH and water was treated with H2C:CHCH2Br in the presence of trioctylmethylammonium chloride, to give bis(4-allyloxyphenyl) sulfone, which was heated in trichlorobenzene at 216-219°, to give I. Compns. containing I and a leuco dye are used in thermal recording materials. These compns. scored high in color formation as well as in water-, moisture-, and plasticizer-resistance tests.

Ι

IT 41481-66-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as thermal recording material)

RN 41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

H2C=CH-CH2

OH

$$CH_2$$
-CH=CH2

ANSWER 14 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

CORPORATE SOURCE:

1978:508953 CAPLUS

DOCUMENT NUMBER:

89:108953

TITLE:

Studies on 4,4'-dihydroxydiphenyl sulfone and

4,4'-dihydroxydiphenyl ether

AUTHOR(S):

Prajapati, S. P.; Pardanani, J. H.; Sethna, Suresh Fac. Sci., Maharaja Sayajirav Univ. Borada, Baroda,

SOURCE:

India Journal of the Indian Chemical Society (1977), 54(10),

971 - 4

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE:

LANGUAGE:

Journal English

OTHER SOURCE(S):

CASREACT 89:108953

GΙ

$$\begin{bmatrix} R1 \\ R \end{bmatrix}$$
 X III

AB Fries rearrangement of (4-AcOC6H4)2X (X = O, SO2) gave [3,4-Ac(HO)C6H3]2X (I). Condensation of I (X = SO2) with PhCHO and subsequent cyclocondensation-dehydrogenation, gave bis(6-flavonyl) sulfone. Rearrangement of the di-O-benzoyl derivative of I (X = O) gave [3,4-(PhCOCH2CO)(HO)C6H3]2O, which cyclized in concentrated H2SO4 to give bis(6-flavonyl) ether. Treatment of I with BrCH2CO2Et and subsequent hydrolysis and cyclocondensation gave the benzofurans II (R = H, R1 = Me; X = O, SO2). II (R = Me, R1 = H, X = SO2) was obtained from [3,4-(CH2:CHCH2)(HO)C6H3]SO2 by successive acetylation, bromination, and cyclocondensation in EtOH containing KOH. Cyclocondensation of I (X = O) with AcOEt or CO2Et2 gave bis(2-methyl-6-chromonyl) ether and bis(4-hydroxy-6-coumarinyl) ether; resp. Treatment of (4-NOC6H4)2O with CH2:CHCN and subsequent hydrolysis, cyclocondensation, and dehydrogenation gave bis(6-chromonyl) ether.

IT 41481-66-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclocondensation reaction of)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C=CH-CH2

OH

$$CH_2$$
-CH=CH2

L4 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1973:159124 CAPLUS

DOCUMENT NUMBER:

78:159124

TITLE:

Synthesis and study of unsaturated dicarboxylic ether

acids

AUTHOR(S):

Fedotova, O. Ya.; Korshak, V. V.; Hoang Kim Tung;

Dmitrieva, O. N.; Griva, V. A.

CORPORATE SOURCE:

USSR

SOURCE:

Trudy Instituta - Moskovskii Khimiko-Tekhnologicheskii

Institut imeni D. I. Mendeleeva (1972), No. 70, 96-8 CODEN: TMKIAT; ISSN: 0320-3220

DOCUMENT TYPE:

Journal

LANGUAGE:

Russian

GI For diagram(s), see printed CA Issue.

AB 4,2,5-HO(H2C:CHCH2)2C6H2OH (I) reacted with C1CH2CO2H to give II. III and IV were prepared analogously. I was prepared by the reaction of 4-HOC6H4OH with CH2:CHCH2Br, followed by a Claisen rearrangement.

IT 41481-66-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C
$$=$$
 CH $=$ CH2 OH $=$ CH2 $=$ CH2

ANSWER 4 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN L4

ACCESSION NUMBER: 136:309756

DOCUMENT NUMBER:

TITLE:

Preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl

sulfone for color developer for thermal printing

materials

INVENTOR(S): Kameoka, Ikuo; Tsuge, Koki; Nishikawa, Makoto;

Takahashi, Toshiaki

PATENT ASSIGNEE(S): Nikka Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002114757	Α	20020416	JP 2000-311500	20001012
PRIORITY APPLN. INFO.:			JP 2000-311500	20001012

OTHER SOURCE(S): CASREACT 136:309756

The compound is prepared by thermal rearrangement of

4,4'-diallyloxydiphenyl sulfone in the presence of 0.5-20 mol equivalent

(based on alkalies in 4,4'-diallyloxydiphenyl sulfone) of acid.

4,4'-Diallyloxydiphenyl sulfone was heated with H2SO4 in paraffin solvent at 205-210° for 7 h to give a reaction mixture containing 92.4 area% (by HPLC) 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone.

41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone ΙT

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of diallyldihydroxydiphenyl sulfone)

RN 41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

$$H_2C \longrightarrow CH - CH_2$$

OH

 $CH_2 - CH \longrightarrow CH_2$

ANSWER 5 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:77464 CAPLUS <<LOGINID::20071005>>

DOCUMENT NUMBER:

136:118268

TITLE:

Preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone as color developer for thermal recording

materials,

INVENTOR(S):

Tsuge, Yoshiki; Kameoka, Ikuo; Nishikawa, Makoto;

Yoshino, Takeshi; Takahashi, Toshiaki

PATENT ASSIGNEE(S):

Nikka Chemical Industry Co., Ltd:, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
· JP 2002030065	Α	20020129	JP 2000-216357	20000717
PRIORITY APPLN. INFO.:		_	JP 2000-216357	20000717

CASREACT 136:118268 OTHER SOURCE(S):

Title compound (I), which is free from impurities causing fog, is prepared by thermal rearrangement of 4,4'-diallyloxydiphenyl sulfone (II) containing ≤50 weight ppm (as NaOH) alkalies. II (alkali content 5 ppm) was heated in Diana Fresia W 8 -kerosene mixture at 205-210° for 7 h,

treated with activated C, and recrystd. from dichloroethane to give I with 96.2% purity and indan derivative content 0.3%.

ΙT 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of diallyldihydroxydiphenyl sulfone as color developer for thermal recording materials)

RN 41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

H₂C=CH-CH₂
OH
$$CH_2$$
-CH=CH₂

L4 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:77463 CAPLUS <<LOGINID::20071005>>

DOCUMENT NUMBER:

TITLE:

Preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl

sulfone as color developer for thermal recording

materials

136:118267

INVENTOR(S):

Kameoka, Ikuo; Tsuge, Yoshiki; Nishikawa, Makoto;

Yoshino, Takeshi; Takahashi, Toshiaki

Nikka Chemical Industry Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002030064	Α	20020129	JP 2000-216356	20000717
PRIORITY APPLN. INFO.:			JP 2000-216356	20000717

OTHER SOURCE(S):

CASREACT 136:118267

AB Title compound (I), which is free from impurities causing fog, is prepared by thermal rearrangement of 4,4'-diallyloxydiphenyl sulfone (II) containing ≤50 weight ppm (as NaOH) alkalies in the presence of 0.01-1 weight% amines and/or antioxidants. II (alkali content 5 ppm) was heated in Diana Fresia W 8-kerosene mixture in the presence of N,N-dimethylaniline and hydroquinone monomethyl ether at 205-210° for 7 h, treated with activated C, and recrystd. from dichloroethane to give I with 97.1% purity and indan derivative content 0.2%.

IT 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of diallyldihydroxydiphenyl sulfone as color developer for thermal recording materials)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C=CH-CH2

OH

$$CH_2$$
-CH=CH2

L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:481081 CAPLUS <<LOGINID::20071005>>

DOCUMENT NUMBER: 131:151759

TITLE: Thermal recording materials for images with good oil

and plasticizer resistance

INVENTOR(S): Okuda, Masatoshi; Yonese, Naoki

PATENT ASSIGNEE(S): Oji Paper Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		-		
JP 11208122	Α	19990803	JP 1998-9425	19980121
PRIORITY APPLN. INFO.:			JP 1998-9425	19980121

AB The materials comprise supports coated with heat-sensitive recording layers containing leuco dyes, 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone developers, and 4-benzyloxyphenyl-4'-(2-methyl-2,3-epoxypropyloxy)phenyl sulfone storage modifiers. The developers are obtained by Claisen rearrangement of 4,4'-diallyloxydiphenyl sulfone and have content of 3-allyl-4,4'-dihydroxydiphenyl sulfone and 5-(3-allyl-4-hydroxy)diphenyl sulfone-1-oxa-2-methylindan ≤0.5%. The materials give fog-free images with good oil and plasticizer resistance.

(thermal recording materials containing sulfone developers for oil- and plasticizer-resistant images)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:481080 CAPLUS <<LOGINID::20071005>>

DOCUMENT NUMBER: 131:151758

TITLE: Thermal recording materials for images with good

storage stability

INVENTOR(S): Watanabe, Kazuo; Iwasaki, Nobuyuki

PATENT ASSIGNEE(S): Oji Paper Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11208121	A	19990803	JP 1998-9424	19980121
PRIORITY APPLN. INFO.:			JP 1998-9424	19980121

AB In the materials having heat-sensitive recording layers, protective layers, and backcoat layers containing re-wetting pastes or adhesives, developers comprise 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone obtained by Claisen rearrangement of 4,4'-diallyloxydiphenyl sulfone and have content of 3-allyl-4,4'-dihydroxydiphenyl sulfone and 5-(3-allyl-4-hydroxy)diphenyl sulfone-1-oxa-2-methylindan ≤0.5%. The materials give fog-free images with good storage stability and light resistance.

IT 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(sulfone developers of thermal recording materials for images with good storage stability)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C=CH-CH2

OH

$$CH_2$$
-CH=CH2

ANSWER 9 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 131:136813

1999:463013 CAPLUS <<LOGINID::20071005>>

DOCUMENT NUMBER:

TITLE: Heat-sensitive recording material containing allyl

dihydroxydiphenylsulfone

INVENTOR(S): Michikawa, Kohei; Okada, Kiyomi

Oji Paper Co., Ltd., Japan PATENT ASSIGNEE(S): SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

IT

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11198545	A	19990727	JP 1998-8754	19980120
PRIORITY APPLN. INFO.:			JP 1998-8754	19980120
				,

The material has a transparent support coated with a leuco dye- and AΒ coloring agent-containing heat-sensitive recording layer and an optional protective layer, in which the developer (average particle size 0.1-1.0μm) comprises 3,3'-dially1-4,4'-dihydroxydiphenylsulfone, manufactured by Claisen rearrangement of 4,4'-diallyloxydiphenylsulfone, containing ≤0.5% 3-allyl-4,4'-dihydroxydiphenylsulfone and 5-(3-allyl-4-hydroxy)diphenylsulfone-1-oxa-2-methylindane. The material

gives clear images with storage stability. 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenylsulfone RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(heat-sensitive recording material containing dihydroxydiphenylsulfone

coloring agent)

RN 41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C=CH-CH2

OH

$$CH_2$$
-CH=CH2

ANSWER 12 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

1987:587555 CAPLUS <<LOGINID::20071005>> ACCESSION NUMBER:

DOCUMENT NUMBER: 107:187555

TITLE: Bisphenol S derivatives as developers for

heat-sensitive recording paper

INVENTOR(S): Ikeda, Fukuji; Takahashi, Toshiaki

PATENT ASSIGNEE(S): Nikka Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 62053957	A	19870309	JP 1985-191972	19850902		
JP 03033153	В	19910516				
PRIORITY APPLN INFO .			JP 1985-191972	19850902		

In manufacturing 3,3'-diallyl-4,4'-dihydroxydiphenylsulfone by the Claisen rearrangement of 4,4'-diallyloxydiphenylsulfone, the reaction is controlled so that the final reaction mixture contains the half-rearranged product, 3-allyl-4-hydroxy-4'-allyloxydiphenylsulfone, 5-20% of the starting material and the completely rearranged product, 3,3'-diallyl-4,4'-dihydroxydiphenylsulfone, ≤90%. The product is recrystd. in a dichloroalkane, aromatic, and alc., glycol, or ether mixed ((10-9):(10-90):(0.1-30) weight%] solvent. The bisphenol S derivs. prepared in the manner give color developers for heat-sensitive recording sheets characterized by low fog.

41481-66-7P ΙT

RL: PREP (Preparation)

(preparation of, by Claisen rearrangement, as heat-sensitive recording color developer)

RN 41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

H2C
$$=$$
 CH $=$ CH2 OH $=$ CH2 CH2 CH2

CAPLUS COPYRIGHT 2007 ACS on STN L4ANSWER 13 OF 15

ACCESSION NUMBER: 1986:168122 CAPLUS <<LOGINID::20071005>>

DOCUMENT NUMBER: 104:168122

TITLE: Phenol derivatives useful in thermal recording

materials

INVENTOR(S):

Shinmoto, Masaki PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan

SOURCE: Ger. Offen., 22 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	DATE APPLICATION NO.			
DE 3504482	A1	19850814	DE 1985-3504482	19850209		
DE 3504482	C2	19920312				
JP 60169456	Α	19850902	JP 1984-24311	19840214		
JP 60208286	A	19851019	JP 1984-63277	19840402		
JP 03034475	В	19910522				
GB 2154236	Α	19850904	GB 1985-2407	19850131		
GB 2154236	В.	19870520				
US 4596997	Α	19860624	US 1985-696913	19850131		
CH 662785 ·	A5	19871030	CH 1985-644	19850212		
PRIORITY APPLN. INFO.:			JP 1984-24311	A 19840214		
			JP 1984-63277	A 19840402		

OTHER SOURCE(S):

CASREACT 104:168122

Ι

GI

$$RO \longrightarrow SO_2 \longrightarrow OR$$
 II

Bis(3-allyl-4-hydroxyphenyl)sulfone (I) is prepared by condensation of the sulfone II (R = H, alkali metal) with allyl derivative H2C:CHCH2R1 [R1 = halo, R2SO3; R2 = alkyl, (un)substituted Ph], followed by rearrangement of the reaction product. Thus, a mixture of 4,4'-sulfonyldiphenol, toluene, NaOH and water was treated with H2C:CHCH2Br in the presence of trioctylmethylammonium chloride, to give bis(4-allyloxyphenyl) sulfone, which was heated in trichlorobenzene at 216-219°, to give I. Compns. containing I and a leuco dye are used in thermal recording materials. These compns. scored high in color formation as well as in water-, moisture-, and plasticizer-resistance tests.

ΙT 41481-66-7P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as thermal recording material)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

ANSWER 15 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN L4

ACCESSION NUMBER: 1973:159124 CAPLUS <<LOGINID::20071005>>

DOCUMENT NUMBER: 78:159124

TITLE: Synthesis and study of unsaturated dicarboxylic ether

acids

AUTHOR(S): Fedotova, O. Ya.; Korshak, V. V.; Hoang Kim Tung;

Dmitrieva, O. N.; Griva, V. A.

CORPORATE SOURCE:

USSR

SOURCE: Trudy Instituta - Moskovskii Khimiko-Tekhnologicheskii

Institut imeni D. I. Mendeleeva (1972), No. 70, 96-8

CODEN: TMKIAT; ISSN: 0320-3220

DOCUMENT TYPE:

Journal

LANGUAGE:

Russian

GΙ For diagram(s), see printed CA Issue.

4,2,5-HO(H2C:CHCH2)2C6H2OH (I) reacted with ClCH2CO2H to give II. III and AB IV were prepared analogously. I was prepared by the reaction of 4-HOC6H4OH with CH2:CHCH2Br, followed by a Claisen rearrangement.

IT 41481-66-7P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

41481-66-7 CAPLUS RN

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

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                  FSTA enhanced with new thesaurus edition
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                  patents
                  CA/CAplus enhanced with CAS indexing in pre-1907 records
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NEWS 16
         AUG 27
                  USPATOLD now available on STN
                  CAS REGISTRY enhanced with additional experimental
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                  spectral property data
                  STN AnaVist, Version 2.0, now available with Derwent
NEWS 18
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NEWS 19
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                  INPADOCDB enhanced with monthly SDI frequency
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NEWS 21
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                  CAplus coverage extended to include traditional medicine
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                  patents
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NEWS 23
         SEP 24
                  CA/CAplus enhanced with pre-1907 records from Chemisches
NEWS 24
         OCT 02
                  Zentralblatt
NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
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L3 402 L2

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L4 3 L3 AND ANTIOXIDANT

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4454891 ACID

85843 ASCORBIC ACID

(ASCORBIC(W)ACID)

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=> S L5 AND MICROWAVE

122326 MICROWAVE

L6 1 L5 AND MICROWAVE

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L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:878367 CAPLUS

DOCUMENT NUMBER:

141:349924

TITLE:

Method for producing 3,3'-diallyl-4,4'-

dihydroxydiphenyl sulfone

INVENTOR(S):

Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki; Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji

PATENT ASSIGNEE(S): Sanko Chemical Industry Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 16 pp.

DOCUMENT TABLE

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

: 1

PATENT INFORMATION:

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
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WO 2004	0898	83		A1		2004	1021		WO 2	004-	JP47	19		2	0040	331
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GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
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              NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
              TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
     JP 2004345955
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     JP 2005075757
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                                                                          20030829
     EP 1612205
                            Α1
                                   20060104
                                                EP 2004-724844
                                                                          20040331
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
     CN 1768032
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                                                CN 2004-80009129
                                                                          20040331
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                                                US 2005-551481
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PRIORITY APPLN. INFO.:
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                                                                      Α
                                                JP 2003-306348
                                                                      Α
                                                                          20030829
                                                WO 2004-JP4719
                                                                         20040331
OTHER SOURCE(S):
                           CASREACT 141:349924
     Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl
     sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone
     (II) to Claisen rearrangement reaction under the irradiation with a
     microwave, preferably in a molten state, more preferably further
     in a substantially oxygen-free atmospheric and in the presence of at least one
     compound selected from the group consisting of an antioxidant, an
     organic base compound and a chelate compound The method allows the production
of the
     objective compound having a high purity with good efficiency in a short time
     in good yield without using solvent. Thus, 10.00 g II and 0.01 g
     N, N-dimethylaniline were added to a quartz flask fitted with a temperature
     sensor and a magnetic stirrer, purged with N, and irradiated with
     microwave (2,450 MHz and 100 W) under a stream of N. After
     melting at 160^{\circ}, the temperature was maintained at 280^{\circ} for 5 min
     by turning on and off the irradiation The reaction mixture was dissolved in 10
     weight% aqueous NaOH solution, decolorized by stirring with a small quantity of
     activated charcoal, filtered, neutralized with HCl for precipitating crystals
to
     give 80-90% I.
     41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone
ΙT
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone by Claisen
        rearrangement of 4,4'-diallyloxydiphenyl sulfone under.
        microwave irradiation in presence of antioxidant, organic
        base compound, or chelate compound)
RN
     41481-66-7 CAPLUS
     Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)
CN
```

H2C=CH-CH2

OH

$$CH_2$$
-CH=CH2

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN 2004:878367 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 141:349924 Method for producing 3,3'-diallyl-4,4'-TITLE: dihydroxydiphenyl sulfone Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki; INVENTOR(S): Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji Sanko Chemical Industry Co., Ltd., Japan PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 16 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. DATE PATENT NO. KIND DATE ______ ______ ----_____ WO 2004-JP4719 20040331 WO 2004089883 Α1 20041021 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG JP 2004345955 Α 20041209 JP 2003-100352 20030403 20050324 JP 2003-306348 20030829 JP 2005075757 Α EP 2004-724844 20040331 EP 1612205 20060104 Α1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK CN 2004-80009129 20060503 20040331 CN 1768032 Α US 2006217574 Α1 20060928 US 2005-551481 20050929 JP 2003-100352 A 20030403 PRIORITY APPLN. INFO.: JP 2003-306348 A 20030829 WO 2004-JP4719 ·W 20040331 CASREACT 141:349924 OTHER SOURCE(S): Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone (II) to Claisen rearrangement reaction under the irradiation with a microwave, preferably in a molten state, more preferably further in a substantially oxygen-free atmospheric and in the presence of at least one compound selected from the group consisting of an antioxidant, an organic base compound and a chelate compound The method allows the production of the objective compound having a high purity with good efficiency in a short time in good yield without using solvent. Thus, 10.00 g II and 0.01 g N,N-dimethylanilinewere added to a quartz flask fitted with a temperature sensor and a magnetic stirrer, purged with N, and irradiated with microwave (2,450 MHz and 100 W) under a stream of N. After melting at 160°, the temperature was maintained at 280° for 5 min by turning on and off the irradiation reaction mixture was dissolved in 10 weight% aqueous NaOH solution, decolorized by stirring with a small quantity of activated charcoal, filtered, neutralized with HCl for precipitating crystals to give 80-90% I.

41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone by Claisen

rearrangement of 4,4'-diallyloxydiphenyl sulfone under microwave

irradiation in presence of antioxidant, organic base compound, or chelate compound)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C
$$=$$
 CH $=$ CH2 OH

CH2 $=$ CH2 CH2

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L4 IBIB ABS HITSTR 1-3.

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

5

ACCESSION NUMBER:

2004:878367 CAPLUS

DOCUMENT NUMBER:

141:349924

TITLE:

Method for producing 3,3'-diallyl-4,4'-

dihydroxydiphenyl sulfone

INVENTOR(S):

Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki;

Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji

PATENT ASSIGNEE(S):

Sanko Chemical Industry Co., Ltd., Japan PCT Int. Appl., 16 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	rent	NO.			KIN	D -	DATE		APPLICATION NO.					DATE			
WO	2004	0898	83		A1		2004	1021	,	WO 2	004-	JP47:	19		2	0040	331
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
											EC,						
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	NO,
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
		TD,	ΤG														
JP	2004	3459	55		Α		2004	1209		JP 2	003-	1003	52		2	0030	403
	2005														_		
EP	1612										004-						
	R:	AT,											-		-	-	-
											TR,				-		
	1768																
	2006						2006	0928									
PRIORITY	Y APP	LN.	TNFO	.:							003-						
											003-				A 21		
OTHER SO	HIRCE	(S) ·			CASI	REAC	т 1Д	1:34		wo 2	004-	JP4/.	19	1	₩ 2.0	JU40.	33I

OTHER SOURCE(S): CASREACT 141:349924

AB Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl

sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone (II) to Claisen rearrangement reaction under the irradiation with a microwave, preferably in a molten state, more preferably further in a substantially oxygen-free atmospheric and in the presence of at least one compound selected

from

the group consisting of an antioxidant, an organic base compound and a chelate compound The method allows the production of the objective compound having a high purity with good efficiency in a short time in good yield without using solvent. Thus, 10.00 g II and 0.01 g N, N-dimethylaniline were added to a quartz flask fitted with a temperature sensor and a magnetic stirrer, purged with N, and irradiated with microwave (2,450 MHz and 100 W) under a stream of N. After melting at 160°, the temperature was maintained at 280° for 5 min by turning on and off the irradiation The reaction mixture was dissolved in 10 weight% aqueous NaOH solution,

decolorized by

stirring with a small quantity of activated charcoal, filtered, neutralized with HCl for precipitating crystals to give 80-90% I.

IΤ 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone by Claisen

rearrangement of 4,4'-diallyloxydiphenyl sulfone under microwave irradiation in presence of antioxidant, organic base compound, or chelate compound)

41481-66-7 CAPLUS RN

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

H2C
$$=$$
 CH $=$ CH $_2$ OH $=$ CH $_2$ CH $=$ CH $_2$ CH $=$ CH $_2$

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

5

ACCESSION NUMBER:

2002:77463 CAPLUS

DOCUMENT NUMBER:

136:118267

TITLE:

Preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone as color developer for thermal recording

materials

INVENTOR(S):

Kameoka, Ikuo; Tsuge, Yoshiki; Nishikawa, Makoto; Yoshino, Takeshi; Takahashi, Toshiaki

PATENT ASSIGNEE(S):

Nikka Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002030064	A	20020129	JP 2000-216356	20000717
PRIORITY APPLN. INFO.:			JP 2000-216356	20000717

OTHER SOURCE(S): CASREACT 136:118267

Title compound (I), which is free from impurities causing fog, is prepared by thermal rearrangement of 4,4'-diallyloxydiphenyl sulfone (II) containing

≤50 weight ppm (as NaOH) alkalies in the presence of 0.01-1 weight% amines and/or antioxidants. II (alkali content 5 ppm) was heated in Diana Fresia W 8-kerosene mixture in the presence of N,N-dimethylaniline and hydroquinone monomethyl ether at 205-210° for 7 h, treated with activated C, and recrystd. from dichloroethane to give I with 97.1% purity and indan derivative content 0.2%.

ΙT 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

(preparation of diallyldihydroxydiphenyl sulfone as color developer for thermal recording materials)

RN41481-66-7 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)-(CA INDEX NAME) CN

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1988:430201 CAPLUS

DOCUMENT NUMBER:

109:30201

TITLE:

Thermographic copying paper containing fluoran and hydroxydiphenyl sulfone for fading-resistant images Katsuta, Shinichiro; Toyoda, Tadashi; Unno, Tomoyuki

INVENTOR(S):

Kohjin Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 5 pp.

PATENT ASSIGNEE(S):

SOURCE:

CODEN: JKXXAF

Т

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62225391	Α	19871003	JP 1986-67312	19860327
PRIORITY APPLN. INFO.:			JP 1986-67312	19860327

$$\mathsf{HO} - \mathsf{SO}_2 - \mathsf{OR}^3$$

AB The thermosensitive layer of a thermog. copying paper contains 3-diethylamino-6-methyl-7-anilinofluoran and/or 3-pyrrolidino-6-methyl-7anilinofluoran as a colorless or pale color former, a hydroxydiphenyl sulfone derivative I (R1-3 = H, C \leq 5 alkyl, or C \leq 5 alkenyl) as a developer, and a heat-melting material. The paper gives images having excellent color d. and fading of the images is prevented. Thus, a paper was coated with a mixture of an aqueous solution containing 3-diethylamino-6-methyl-7anilinofluoran, an aqueous solution containing I (R1-3=H), stearamide, and Zn stearate, polyvinyl alc., and a dispersion containing clay and CaCO3 and dried to obtain a thermal copying paper which gave vinyl chloride-resistant images.

IT 41481-66-7

RL: USES (Uses)

(thermog. copying paper containing leuco dye and, for fading-resistant images)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C
$$=$$
 CH $=$ CH2 OH $=$ CH2 $=$ CH2 $=$ CH2

=> S L3 AND ANTIOXIDANT

122734 ANTIOXIDANT

L7 3 L3 AND ANTIOXIDANT

=> S L3 AND ASCORBIC ACID 86730 ASCORBIC

4454891 ACID

85843 ASCORBIC ACID

(ASCORBIC (W) ACID)

L8 2 L3 AND ASCORBIC ACID

=> D L8 IBIB ABS HITSTR 1-2

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:878367 CAPLUS

DOCUMENT NUMBER:

141:349924

TITLE:

Method for producing 3,3'-diallyl-4,4'-

dihydroxydiphenyl sulfone

INVENTOR(S):

Yanagida, Shozo; Enokida, Hirotaka; Fujimoto, Masaki;

Nakamura, Katsunori; Yamamoto, Tetsushi; Wada, Yuji

PATENT ASSIGNEE(S):

Sanko Chemical Industry Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 16 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.			KIN	D	DATE		1	APPL	ICAT	ION 1	. 00		Di	ATE	
					-											
WO 2004	0898	83		A1		2004	1021	1	WO 2	004-	JP47	19		2	0040	331
W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,
	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	NO,
	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,
	TM,	TN,	TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
•	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,

ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG JP 2004345955 20041209 JP 2003-100352 Α 20030403 JP 2005075757 JP 2003-306348 Α 20050324 20030829 EP 1612205 20060104 EP 2004-724844 20040331 Α1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK CN 1768032 20060503 CN 2004-80009129 Α 20040331 US 2006217574 A1 20060928 US 2005-551481 20050929 PRIORITY APPLN. INFO.: JP 2003-100352 20030403 JP 2003-306348 Α 20030829 WO 2004-JP4719 W 20040331

OTHER SOURCE(S): CASREACT 141:349924

AB Disclosed is a method for producing 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone (I), which comprises subjecting 4,4'-diallyloxydiphenyl sulfone (II) to Claisen rearrangement reaction under the irradiation with a microwave, preferably in a molten state, more preferably further in a substantially oxygen-free atmospheric and in the presence of at least one compound selected

the group consisting of an antioxidant, an organic base compound and a chelate compound The method allows the production of the objective compound having a high

purity with good efficiency in a short time in good yield without using solvent. Thus, 10.00 g II and 0.01 g N,N-dimethylaniline were added to a quartz flask fitted with a temperature sensor and a magnetic stirrer, purged with N, and irradiated with microwave (2,450 MHz and 100 W) under a stream of N. After melting at 160°, the temperature was maintained at 280° for 5 min by turning on and off the irradiation The reaction mixture was dissolved in 10 weight% aqueous NaOH solution, decolorized by stirring

with a small quantity of activated charcoal, filtered, neutralized with HCl for precipitating crystals to give 80-90% I.

IT 41481-66-7P, 3,3'-Diallyl-4,4'-dihydroxydiphenyl sulfone

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of 3,3'-diallyl-4,4'-dihydroxydiphenyl sulfone by Claisen rearrangement of 4,4'-diallyloxydiphenyl sulfone under microwave irradiation in presence of antioxidant, organic base compound, or chelate compound)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1990:468446 CAPLUS

DOCUMENT NUMBER:

113:68446

TITLE:

Thermally-responsive record material containing

ascorbic acid ester for improved

fade resistance

INVENTOR(S):

Glanz, Kenneth D.; Bartman, Gerald C.

PATENT ASSIGNEE(S):

Appleton Papers, Inc., USA

SOURCE:

U.S., 15 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		1000000	Ha 1000 030403	10000001
US 4870047	A	19890926	US 1988-239493	19880901
CA 1309865	A1	19921110	CA 1988-579988	19881013
PRIORITY APPLN. INFO.:			US 1988-239493 A	19880901
OTHER SOURCE(S):	MARPAT	113:68446		
GI				

AΒ Thermally responsive recording materials which are resistant to image fade from contact with common fats or oils, skin oil, carbonless solvents, plasticizers, or high heat and humidity are composed of a heat-sensitive color-forming composition comprising a chromogenic material and an acidic developer in proximate relation, whereby the melting, softening, or sublimation of either material produces a change in color by reaction between the 2, and an ascorbic acid ester (I; R1 = Hor a straight chain or branched chain acyl group of from 9-22 C; R2 = a straight chain or branched chain acyl group of from 8-21 C) as a fading inhibitor.

41481-66-7, Bis(3-allyl-4-hydroxyphenylsulfone) IΤ

RL: USES (Uses)

(thermal recording materials containing ascorbic acid ester and, for improved resistance to fadding by oils and plasticizers and solvents)

41481-66-7 CAPLUS RN

Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME) CN

$$H_2C = CH - CH_2$$

OH

 $CH_2 - CH = CH_2$

=> S L3 AND CHELATE AGENT 46236 CHELATE 865949 AGENT 123 CHELATE AGENT (CHELATE (W) AGENT) L9 O L3 AND CHELATE AGENT => S L3 AND CHELATING AGENT
54393 CHELATING
865949 AGENT
15328 CHELATING AGENT
(CHELATING (W) AGENT)
L10 0 L3 AND CHELATING AGENT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:430201 CAPLUS

DOCUMENT NUMBER: 109:30201

TITLE: Thermographic copying paper containing fluoran and

hydroxydiphenyl sulfone for fading-resistant images Katsuta, Shinichiro; Toyoda, Tadashi; Unno, Tomoyuki

PATENT ASSIGNEE(S): Kohjin Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

Ι

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62225391	Α	19871003	JP 1986-67312	19860327
PRIORITY APPLN. INFO.:			JP 1986-67312	19860327

$$\mathsf{HO} \xrightarrow{\mathsf{NO}_2} \mathsf{OR}^3$$

AB The thermosensitive layer of a thermog. copying paper contains 3-diethylamino-6-methyl-7-anilinofluoran and/or 3-pyrrolidino-6-methyl-7-anilinofluoran as a colorless or pale color former, a hydroxydiphenyl sulfone derivative I (R1-3 = H, C≤5 alkyl, or C≤5 alkenyl) as a developer, and a heat-melting material. The paper gives images having excellent color d. and fading of the images is prevented. Thus, a paper was coated with a mixture of an aqueous solution containing

3-diethylamino-6-methyl-7-

anilinofluoran, an aqueous solution containing I (R1-3=H), stearamide, and Zn stearate, polyvinyl alc., and a dispersion containing clay and CaCO3 and dried to obtain a thermal copying paper which gave vinyl chloride-resistant images.

IT 41481-66-7

RL: USES (Uses)

(thermog. copying paper containing leuco dye and, for fading-resistant images)

RN 41481-66-7 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(2-propen-1-yl)- (CA INDEX NAME)

H2C
$$=$$
 CH $=$ CH2 OH $=$ CH2 $=$ CH2